Program Description: Appropriate for ages 5 - 8 (K - 3rd grade)

Explores the differences and similarities between butterflies and moths through an outdoor story time and poetry reading, as well as provides information and hands-on activities to learn about butterfly and moth life cycles, habitats and migratory patterns.

Key Small Group Activities:

<u>Life Cycle Tubes</u> - Give each child in the group one tube and a picture of one part of the life cycle of a specific butterfly or moth. The group will have to deduce which picture should affix to which tube because the tubes "nest" so the picture of the egg should be affixed to the smallest tube and so on. Then, each child will color and affix his or her picture to the correct tube. When finished, the group will present its butterfly or moth's life cycle to the other groups.

<u>Camouflage</u> - Talk about how the coloring of some animals mimics their environments and why specifically butterflies and moths. Then have each group design a butterfly or moth and color it accordingly. Write a poem about it. Each group will recite the poem and talk about why they designed the butterfly or moth that way.

<u>Butterfly Net</u> - Discussion of migratory animals and why some butterflies migrate, especially the monarch butterfly. Discuss how people study insects and why. Each child will make a butterfly net to take home, as well as receive a bundle of milkweed seeds to plant near his or her home to help the monarch butterfly in its migration.

Hike:

The hiking trail is available for groups to traverse in short or longer distances, depending on the size and ability level of participants. A portion of the trail is handicapped accessible.

Draw a line from the word to the correct definition

Cocoon	to become something different
Compound Eyes	to shed a skin/outer covering
Proboscis	a case where the pupa develops
Antennae Molt	a case spun from silk threads, usually for moths
	large insect eyes made of lots of lenses
Chrysalis	two long organs that insects use to touch and smell
Metamorphosis	the tongue of a butterfly or moth that sucks up nectar
Draw your own special butterfly	

2 3

The life cycle of butterflies and moths is four stages: egg, caterpillar, chrysalis and winged adult.

Match the number with the picture:









Moths and Butterflies have several differences. Each sentence below tells about a way that they are different. Use a word from the word bank to complete each sentence.

- 1. _____ fly at night and butterflies are active during the day.
- 2. Moth chrysalises are wrapped in a ______ of silk threads.
- 3. Moths, especially the males, have antennae that look like ______.
- 4. Caterpillars of large moths eat for a month sometimes, while butterfly caterpillars eat only for 10-15 ______.
- 5. Moths can have thick, _____ bodies.
- 6. Some moths have _____ that can sting, so you have to be careful.

Word Bank

days cocoon fuzzy

hairs Moths feathers

Handouts courtesy of Maury County Parks & Recreation

Use the picture below to answer the questions.



How many butterflies are blue? How	ow many butterflies are red?
How many butterflies are there in all?	
How many more butterflies are red than blue?	
Make up your own problem and answer. (For example: I	How many butterflies are on flowers? 3)

Additional Resources Books are available at Maury County Public Library

A Butterfly Grows by Stephen Swinburne

A Level 2 easy reader with lovely photographs.

Butterflies and Moths by Nic Bishop

The most beautiful, educational and interesting photographs of butterflies, moths, and the metamorphosis process along with easy to read and understand text.

http://www.butterfliesandmoths.org/

A must-see just for the unbelievable photographs!

Caterpillar, Caterpillar by Vivian French

Very informative book told in a story format with wonderful illustrations.

Caterpillars, Bugs and Butterflies by Mel Boring

Great starter reference on several species with nice illustrations and activities.

From Caterpillar to Butterfly by Deborah Heiligman

A good introduction to the subject in story form, especially if the classrooms are incorporating having a caterpillar to study.

Insectigations; 40 hands-on activities to explore the insect world by Cindy Blobaum

A great reference for older kids and teachers. Lots of interesting activities to do with simple materials.

http://www.kidsbutterfly.org

A website dedicated to teaching children about butterflies with lots of links and photos.

The Life Cycles of Butterflies by Judy Burris and Wayne Richards

A wonderful "field guide" book that gives photographic timelines of the lifecycles of several species as well as a section on cultivating a habitat for butterflies.

http://sciencespot.net/Pages/adtinspg.html

This is a fantastic site for educators or homeschoolers grades 5^{th} - 8^{th} to use as a template for lesson plans.

Waiting for Wings by Lois Ehlert

A special and beautifully illustrated storybook, especially for younger children.

Curriculum Standards

	Culliculum Standards
<u>English</u>	<u>Math</u>
Stnd. 1 - Language	Stnd. 5 - Data, Probability & Statistics
Stnd. 2 - Communication	
Stnd. 3 - Writing	Reading
Stnd. 4 - Research	1.0 - Development of Reading & Listening Skills
Stnd. 5 - Logic	
Stnd. 6 - Informational Text	<u>Science</u>
Stnd. 7 - Media	Stnd. 2 - Interdependence
Stnd. 8 - Literature	Stnd. 3 - Flow of Matter & Energy
	Stnd. 4 - Heredity

Stnd. 5 - Biodiversity & Change

Survey

Using a scale of 1-10, with 1 being "terrible" and 10 being "excellent," how would you rate the following aspects of the packet?

Overall organization of packet?
Material covered in packet?
What was your favorite part of the packet and why?
What was your least favorite part of the packet and why?
Did you find the available handouts helpful? Why or why not?
What could be done to improve future environmental education endeavors? (special topics, other types of programs, facilities, etc.)
Other comments: